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-continued

Corn starch	30 mg
Crystalline cellulose	20 mg
Hydroxypropylcellulose	7 mg
Magnesium stearate	2 mg

Mixed powders prepared according to the above formulation were compressed to give tablets for internal use.

## FORMULATION EXAMPLE 3

Tablets (tablets for internal use)

Formulation weighing 180 mg per tablet

Compound of Example 63	100 mg
Lactose	45 mg
Corn starch	20 mg
Low substituted hydroxypropylcellulose	9 mg
Polyvinyl alcohol (partially saponified)	5 mg
Magnesium stearate	1 mg

Mixed powders prepared according to the above formulation were compressed to give tablets for internal use.

## INDUSTRIAL APPLICABILITY

The compound of the present invention is useful as a therapeutic agent such as platelet coagulation inhibitor because it has a  $\mathrm{PGI}_2$  receptor antagonistic activity and also has low toxicity.

What is claimed is:

1. A pharmaceutical composition comprising a heterocyclic compound represented by the following general formula (1) or a salt thereof as an active ingredient:

wherein  $R^1$  and  $R^2$  are the same or different and each represents an optionally substituted aryl, and the substituents are the same or different and 1 to 3 substituents are selected from the group consisting of halogen, alkyl, haloalkyl,  $_{55}$  arylalkyl, alkoxy, alkylthio, alkoxyalkyl, alkylsulfonyl, hydroxy, amino, monoalkylamino, dialkylamino, carboxy, cyano and nitro,

- Y represents N or N→O, Z represents CR<sup>6</sup>; and R<sup>6</sup> represents hydrogen, alkyl, or halogen,
- A represents NR<sup>7</sup> or SO, and R<sup>7</sup> represents hydrogen, alkyl, alkenyl or cycloalkyl,
- D represents alkylene or alkenylene which are optionally substituted with hydroxy, or A and D are combined with 65 each other to form a divalent group represented by the following formula (2):

$$-- N \xrightarrow{(CH_2)r} (CH_2)t --$$
(2)

r represents an integer of 0 to 2, q represents an integer of 2 to 3, and t represents an integer of 0 to 4,

E represents phenylene or single bond, or D and E are combined with each other to form a divalent group represented by the following formula (3):

u represents an integer of 0 to 2, and v represents 0 or 1, G represents O, S, SO, SO<sub>2</sub>, or C(R<sup>8</sup>)(R<sup>9</sup>), and R<sup>8</sup> and R<sup>9</sup> are the same or different and each represents hydrogen or alkyl

R<sup>3</sup> and R<sup>4</sup> are the same or different and each represents hydrogen or alkyl,

Q represents carboxy, alkoxycarbonyl, tetrazolyl, carbamoyl, monoalkylcarbamoyl, dialkylcarbamoyl, or a group represented by the following formula (22):

$$---CONH--SO_2-R^{10}$$
(22)

R<sup>10</sup> represents amino, monoalkylamino, dialkylamino, hydroxy, optionally substituted alkyl, optionally substituted aryl, optionally substituted aryloxy, or optionally substituted heterocyclic group, and the substituents of alkyl, aryl, aryloxy or heterocyclic group are the same or different and 1 to 3 substituents are selected from the group consisting of halogen, alkyl, haloalkyl, arylalkyl, alkoxy, alkylthio, alkoxyalkyl, alkylsulfonyl, hydroxy, amino, monoalkylamino, dialkylamino, carboxy, cyano and nitro;

and a pharmaceutically acceptable carrier.

2. The pharmaceutical composition according to claim 1, wherein, in the formula (1),  $R^1$  and  $R^2$  are the same or different and each represents optionally substituted phenyl, and the substituents are the same or different and 1 to 3 substituents are selected from the group consisting of halogen, alkyl and alkoxy,

Y and Z correspond to either of the following cases (1) and (2):

- (1) Y is N, and Z is CH, and
- (2) Y is  $N\rightarrow O$ , and Z is CH,
- A represents NR<sup>7</sup>, and R<sup>7</sup> represents hydrogen, alkyl, or cycloalkyl,
- D represents alkylene or alkenylene,
- E represents single bond,

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G represents O, S, SO, SO<sub>2</sub>, or C(R<sup>8</sup>)(R<sup>9</sup>), and R<sup>8</sup> and R<sup>9</sup> each represents hydrogen,

R<sup>3</sup> and R<sup>4</sup> are the same or different and each represents hydrogen or alkyl, and